

i below named inventor. I hereby declare that:

My residence, post office address and clusenship are as stated below next to my name.

I believe I am the original. This and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural assess are listed below) of the subject matter which is claimed and for which a patent is sought on the invention earlied:

	SYSTEM AND METHOD FOR II	ie eesicient clearing o	E SPECTRUM
the specification	of which		
a. 🔲	is attached hereto		
b. 🖾	was filed on December 21, 2000 a	Dockes No. 3288,2002	
•	PCT FILED APPLICATIO	n entering national s	TAGE
e. 🛚	was described and claimed in Intenon (if any).	national Application No	filed on and as amended
I hereby state the claims, as amend	at I have reviewed and updets and the death of the land and the land and the land and land and land are land and land and land and land and land and land are land and land and land and land and land and land are land and land and land and land are land ar	e convenis of the above-identifie ove.	d specification, including the
I acknowledge t	be dury to disclose information which	is material to patentability as d	lefined in 37 C.F.R. § 1.56.
I hereby specify to be distant:	the following as the correspondence	address to which all communic	ations about this application are
SEND	CORRESPONDENCE TO:	Stadley B. Green MORGAN & FINNEGAN, L. 345 Park Averale New York, N.Y. 10154	LP.
DIREC	T TELEPHONE CALLS TO: (202)	857-7887	
of any applica filed b	by claim foreign priority benefits und foreign application(s) for patent or it allon(s) destinating at least one count such foreign application(s) for patent the count on the same subject matter haviation on which priority is claimed:	iventor's certificate or under § 3 ity other than the U.S. listed bel tor inventor's certificate or such	65(a) of any PCT international new and also have identified PCT international application(s)

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	Docket No. 3788-7007US1 The attached 35 U.S.C. § 119 claim for priority for the application(s) listed below forms a part of this declaration.							
	Country/PCT	Application Number	Due of filing (day, month, yt)	Date of issue (day, month, yr)	Priority Claimsd			
					A N A N			
3		•	•	S. provisional applicari				
Provisional Application		enioa Blo.	Date of	Date of filing (day, month, yr)				
60/171.303			December 21_1999					
Al				ation or contini Esignating the L				
	y claim the benefit was of any PCT internatio			uny United States appl ed below.	ication(s) or under §			
US/PCT Application Serial No.		io. Fili			ding, abandoned)/ essigned (Por PCT)			
	·····				US/PCT			
Applic	azion Serial No.	Filing Date,	Status (patented, pending, aba U.S. application no.				

In this continuation-in-part application, insofar as the subject matter of any of the claims of this application is not disclosed in the above listed prior United States or PCT international application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application(s) and the national or FCT international filing date of this application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by thus or Imprisonment, or both, under Section 1001 of Tide 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Jul-12-6,001 11:30am



Docket No. 3788-7007US1

I hereby appoint the following anomays and/or agents with full power of substitution and revocation, to prosecute this application to receive the patent, and to transact all business in the Patent and Tradement Office connected merewith: John A. Diaz (Reg. No. 19,550), John C. Vassil (Reg. No. 19,098), Alfred P. Ewert (Reg. No. 19,887), David H. Pfeiler (Reg. No. 19,825), Hurry C. Marcus (Reg. No. 22,390), Robert IJ. Paulson (Reg. No. 21,046), Stephen R. Smith (Reg. No. 22,615), Kurt E. Richter (Reg. No. 24,052), J. Robert Dailey (Reg. No. 27,434). Eugene Moroz (Reg. No. 25,237), July F. Sweensy (Rog. No. 37.471), Arnold L Rady (Reg. No. 26,601), Christopher A. Hugher (Reg. No. 26,914), William S. Failer (Reg. No. 26,738), Joseph A. Colvaruso (Reg. No. 28,287), James W. Gould (Reg. No. 28,859), Richard C. Komson (Reg. No. 27,913), Israel Bluzz (Reg. No. 26,710), Burtholometer Vordirams (Reg. No. 28,483), Maria C.H. Lin (reg. No. 29,323), Joseph A. DeGirolamo (Reg. No. 28,595), Michael P. Dougherry (Reg. No. 32,730), Seed J. Atles (Reg. No. 32,454), Andrew M. Riddles (Reg. No. 31,657), Bruce D. DeRenzi (Reg. No. 33,676), Michael M. Murray (Reg. No. 32,537), Mark I. Abate (Reg. No. 32,527), John T. Gallagher (Reg. No. 35,516), Steven F. Moyer (Reg. No. 35,613) and Kenneth H. Sonnenteld (Reg. No. 33,285), Tony V. Pezzano (Reg. No. 38.271), Andrea L. Wayde (Reg. 43.979) and Walter O. Hanchuk (Reg. No. 35,179) of Morgan & Finnegan, L.L.P. whose address is: 345 Park Avenue, New York, New York, 10154; and Michael 9. Marcus (Reg. No. 31,727) and John E. Hoel (Reg. No. 26,279) of Morgan & Finnegan, L.L.P., whose address is 1775 Eye Street, Suite 400, Washington, D.C. 20006.

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I hereby authorize the U.S. attorneys and/or agents named hereinabove to accept and tollow instructions fromas to any action to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and/or agents and me. In the event of a change in the person(s) from whom instructions may be taken I will so notify the U.S. attorneys and/or agents named hereinabove.

Full name of sole or first inventor. Lawrence M. AUSUBEL

Inventor's signature?

Lamane Unal

7/6/2001

date Residence: 2920 Garfield Terrace, N.W., Washington, D.C. 20008, USA

Cipzenship: USA

Post Office Address: Same

Bull name of second inventor: Peter C. CRAMTON

Inventor's sireature

Residence: 6418 Dahlonega Road, Berbesda MD 20816, USA

7/6/2001

Citizenship: USA

Post Office Address: Same

図 ATTACHED IS ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR Signature by Third and Subsequent inventors form.

Doubles No.

Docker No. 5788-7007US1

Full same of third inventor. Raul B. MILGROM

Environtes signatura

dase 21- June - 01

Residence: 150 Lekeviow, Cambridge, MA 02 138

Citizenship: USA

Post Office Address: Sams

Pull peace of fourth inventor:

lavemor's eignature?

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Besidence.

Citizenship:

Post Cassos Address:

- Before signing this declaration, each person signing must:
 - Review the declaration and varify the corresponds of all information therein; and
 - 2. Review the specification and the claims, including any amendments made to the claims.

Asser the declaration is timed, the specification and claims are not to be abored.

To the inventor(6):

The following are exied in or pertinent to the declaration attached to the accompanying application:

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Duty to disclose information material to passurability

A posent by its very samure is effected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the date an application is being examined, the Office is aware of and evaluates the reachings of all information agreeful to paramability. Each individual annotated with the filing and proceedings of a parama application has a dayly of caudor and good frith in dealing with the Office, which includes a dury to disclose all information become to that individual to be material to paramability as defined in this season. The duty to disclose information exists with respect to each parallel claim until the claim is carried or withdrawa from consideration, or the application becomes abandoned. Information material to the patential in the consideration need not be cubanted if the information is not meterial to the patentiality of any claim remaining under consideration in the coplication. There is no duty to substitute information which is not material to the patentiality of any existing claim. The duty to disclose all information has patentiality of any claim issued in a patential to the contribute of the Office or submitted to the Office in the manuar processive by §§1.97(b)-



Doctor No. 3788-7007US!

§§1.97(b)-(d) and 1.98. However, so passes will be granted as an application in connection with which fraud on the Office was practiced or an empted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

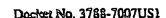
- (1) prior art cited in search reports of a foreign parent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentally defines, to make sure that any material information contained therein is disclosed to the Office.

Tinle 35 U.S. Code & JUI

Inventions patentable

Whose invents or discovers any new and useful process, machine, manufacture, or composition of maner, or any new and useful improvement thereof, may obtain a parent therefor, subject to the conditions and requirements of this title.





Title 35 U.S. Code & 1002

Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication to this or a foreign country, before the invention thereof by the applicant for patent.
- (b) the invention was patented or described in a printed publication in this or forcign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first paterned or caused to be paterned, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign equatry prior to the date of the application for patern in this country on an application for patern or inventor's certificate filed more than twelve months before the filing of the application in the United States.
- (a) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of action 371(c) of this title before the invention thereof by the applicant for patent, or
- (f) he did not himself invent the subject matter sought to be petented, or
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conseption and reduction to prectice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Dida 35 U.S. Cooke & LOS

Conditions for patentability: non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the matter in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.



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Tirle 35 U.S. Code & 112 (in more)

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Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it permins, or with which it is most nearly connected, to make and use the same, and shall set forth the best made contemplated by the inventor of carrying out his invention.

Minds 35 JUS Coole & 119

Bounds of earlier filing dose in foreign country; right of priority

An application for patent for an invention filed in this country by any person who has, or whose legal representatives or assigns have, previously regularly filed an application for a patent for the same invention in a foreign country which affords similar privileges in the case of applications filed in the United States, aball have the same effect as the same application would have if filed in this country on the date on which the application for patent for the same invention was first filed in such foreign country, if the application is this country is filed within twelve months from the sattlest date on which such foreign application was filed; but no patent shall be granted on any application for patent for an invention which had been granted or described in a printed publication in any country more than one year before the date of the actual filing of the application in this country, or which had been in public use or on sale in this country more than one year prior to such filing.

Duk 35 U.S. Code 5 120

Benefit or earlier filing date in the United States

An application for passes for an invention disclosed in the manner provided by the first paragraph of section 112 of this cide in an application previously filed in the United States, or as provided by section 363 of this tide, which is filed by an inventor or inventors massed in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or an application similarly emitted to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application.

Please read carefully before signing the Declaration attached to the accompanying Application.

If you have any questions, please contact Morgan & Finnegan, L.L.P.